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BOISE STATE'S JOURNEY TO A K–12 ONLINE TEACHING ENDORSEMENT PROGRAM

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The key to successful K–12 online learning may rely more on the quality of instruction than the medium used to deliver that instruction (Rice, 2012). The quality of online instruction and teachers' professional development concerning teaching online remains a critical issue, as well as a challenge, in the field of K–12 online teaching (Fisk, 2011). Higher education institutions are beginning to address this issue by providing teachers with K–12 online teaching certificate or endorsement programs. Boise State University (BSU) is one such institution.

Currently, policies that guide the practice of K–12 online education lag behind in terms of what states are doing or are planning to do to ensure that online teachers have the necessary qualifications and skills to teach online (Fisk, 2011). As the topic of online teaching preparation increases in visibility, more and more states and organizations have become involved in setting quality standards for K–12 online education and now are adopting specific requirements for online teachers (Vander Ark, 2010). The *Idaho Standards for Online Teachers* (Idaho State Board of Education and Idaho State Department of Education, 2010) and the Idaho K–12 Online Teaching Endorsement are a good example. The essence of these standards and endorsement efforts is to guide online education practice and ensure that teachers have the necessary qualifications and skills to be effective in online education environments. They recognize that successful online teaching requires a unique set of knowledge and skills, which is similar in nature to the types of specialized skills required in subject areas such as special education or reading.

Questions have been raised as to whether there is a need for K–12 online teaching endorsements at all. A teaching endorsement is usually a process demonstrating that a teacher possesses certain competencies and is endorsed by the state to teach in a certain subject area, while a licensure only demonstrates a teacher has the permission to teach in that state. Relevant literature would suggest that knowledge and skills developed in order to be qualified to teach in face-to-face settings are not adequate preparation for teaching online (Deubel, 2008). The need for licensed teachers to be certified or endorsed in teaching online has been acknowledged by both researchers and educational organizations (Kennedy & Archambault, 2012; National Education Association [NEA],

2012). The NEA recommended that "teachers who provide distance education should in addition be skilled in learning theories, technologies, and teaching pedagogies appropriate for the online environment" (NEA, 2012, para. 10).

The reality is that few teacher education programs in the United States offer any training in learning theories or teaching pedagogies appropriate for online environments (Kennedy & Archambault, 2012; Patrick & Dawley, 2009). This is disturbing considering that in the *Going Virtual!: 2010* report, Dawley, Rice, and Hinck (2010) reported that 12% of brand-new teachers had never taught face-to-face. About 25% of new online teachers received no training in online teaching methods. However, that percentage decreased dramatically after five years of online teaching (12%). About 81% of online teachers reported receiving ongoing professional development in online instruction, typically through the organizations in which they were employed.

The state of Idaho is one of four states (along with Florida, Minnesota, and Wisconsin) that stand out in providing a wide variety of full online programs and supplemental options for students across most grade levels (International Association for K–12 Online Learning, 2012). Idaho has been at the forefront of K–12 online learning since 2006 with the inception of its state supplemental online program, the Idaho Digital Learning Academy (IDLA). As of 2012 Idaho had eight approved cyber charter schools that primarily deliver full-time K–12 online learning. Steady growth in enrollments in Idaho's virtual schools has further highlighted the need for online teacher training as the next immediate step in Idaho's K–12 online learning development (Watson, Murin, Vashaw, Gemin, & Rapp, 2010, 2011, 2012).

In 2008 the Office of Teacher Certification in the Idaho State Department of Education appointed a committee to consider the viability of a state endorsement in K–12 online teaching. The committee included respective stakeholders from Idaho, including higher education representatives from private and public institutions, representatives from state colleges of education, advocates for publicly funded K–12 online schools and programs, practicing teachers, and State Department of Education and State Board of Education members. The committee reached a consensus on the need for establishing a K–12 online teaching endorsement in the state of Idaho. A subcommittee of education experts was subsequently created to develop the Idaho State standards, which would inform the criteria for the endorsement.

In the following section we describe the overall picture of national and state standards that guided the development of Idaho's standards for K–12 online teaching. Idaho's standards for K–12 online teaching are the foundation for Idaho's journey to a K–12 online teaching endorsement.

Idaho Standards for Online Teachers

The Idaho standards for quality online teaching were developed from extensive research and synthesis of previously recognized online standards provided by state, national, and international organizations. In 2006 the NEA published its *Guide to Online High School Courses* (2006a) and *Guide to Teaching Online Courses* (2006b). The *Guide to Teaching Online Courses* recommended that colleges of education should train every new teacher to teach online. In general, NEA's standards proposed recommendations for highly

facilitated courses that were student-centered, collaborative, and flexible, and that actively fostered the development of 21st-century skills.

The International Society for Technology in Education (ISTE)'s National Educational Technology Standards (NETS) for students, teachers, and administrators also informed the development of Idaho's standards for online teaching as well as the development of the endorsement (International Society for Technology in Education, 2007, 2008, 2009). The ISTE NETS for Teachers (NETS•T) had four different levels (i.e., beginning, developing, proficient, and transformative) for directing and measuring teachers' use of technology. The first three levels' standards were viewed as more appropriate and timely for traditional teachers using technology in Idaho schools. Although not specific to online teaching, the ISTE NETS standards addressed the creative and intellectual skills necessary to live, interact, learn, and teach in a 21st-century global and digital world. In particular the committee consisting of respective stakeholders from Idaho was interested in aligning the online teaching endorsement with ISTE's transformative (i.e., creative and innovative use of technology) standards for teachers.

Finally, in 2008 the International Association for K–12 Online Learning (iNACOL) released its *National Standards for Quality Online Teaching* (updated in 2011; International Association for K–12 Online Learning, 2011). These standards highlighted teaching skills and methods (in both online and blended classes) in the following areas:

- Knowledge of online instruction (including concepts, structures, and instructional strategies).
- Knowledge and competencies to use technologies to support online learning and engagement.
- Knowledge and competencies to implement interactive and collaborative strategies.
- Knowledge of online classroom management, student online learning assessment, and online communication skills.
- Knowledge and competencies to deal with legal, safety, and ethical issues in online learning.

Each of these earlier initiatives informed the development of the *Idaho Standards for Online Teachers*. In 2010 a proposal to include these standards in the Idaho Standards for the Initial Certification of Professional School Personnel was filed and approved by the Professional Standards Commission. In 2011 the standards were approved by the Idaho legislature. The *Idaho Standards for Online Teachers* required that all teacher candidates for the endorsement meet the standards specific to their discipline area(s) in addition to the Idaho's Core Teacher Standards, which were basic standards for any licensed teacher in the state. The *Idaho Standards for Online Teachers* consisted of the following 10 standards:

Standard #1: Knowledge of Online Education—The online teacher understands the central concepts, tools of inquiry, and structures in online instruction and creates learning experiences that take advantage of the transformative potential in online learning environments.

Standard #2: Knowledge of Human Development and Learning—The teacher understands how students learn and develop, and provides opportunities that support their intellectual, social, and personal development.

Standard #3: Modifying Instruction for Individual Needs—The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to learners with diverse needs.

Standard #4: Multiple Instructional Strategies—The online teacher understands and uses a variety of instructional strategies to develop students' critical thinking, problem solving, and performance skills.

Standard #5: Classroom Motivation and Management Skills—The teacher understands individual and group motivation and behavior and creates a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.

Standard #6: Communication Skills, Networking, and Community Building—The online teacher uses a variety of communication techniques, including verbal, nonverbal, and media, to foster inquiry, collaboration, and supportive interaction in and beyond the classroom.

Standard #7: Instructional Planning Skills—The online teacher plans and prepares instruction based upon knowledge of subject matter, students, the community, and curriculum goals.

Standard #8: Assessment of Student Learning—The online teacher understands, uses, and interprets formal and informal assessment strategies to evaluate and advance student performance and to determine program effectiveness.

Standard #9: Professional Commitment and Responsibility—The online teacher is a reflective practitioner who demonstrates a commitment to professional standards and is continuously engaged in purposeful mastery of the art and science of online teaching.

Standard #10: Partnerships—The online teacher interacts in a professional, effective manner with colleagues, parents, and other members of the community to support students' learning and well being.

The full standards can be viewed at http://www.sde.idaho.gov/site/forms/augDocs/Online_Teaching_Standards_OSBE.pdf.

Each of the standards is associated with a list of statements related to detailed knowledge and performance statements that K–12 online teachers should possess, as well as the competencies needed to implement their knowledge in the online environment (Idaho State Board of Education and Idaho State Department of Education, 2010).

Development of Idaho's K-12 Online Teaching Endorsement

The online teaching endorsement committee members agreed that their desired outcome was to develop a voluntary competency-based, K–12 online teaching endorsement. Teacher candidates should be able to choose to demonstrate their competencies in K–12 online teaching with required coursework or by supplementing required coursework

with evidence of meeting competencies that had been aligned with the new standards for online teaching (e.g., through artifacts resulting from professional development activities). Throughout the process, the committee considered how the endorsement might be structured, challenges that might be encountered in developing endorsement programs that met the endorsement requirements, the actual implementation process for such a program, and how to keep the endorsement current in terms of emerging knowledge and technologies in online learning.

The structure of the endorsement requires that it be specific to the K–12 learning environment, crossing over into online instruction while maintaining Highly Qualified Teacher (HQT) standards (Information for Financial Aid Professionals, 2004). Participant teacher candidates should also be required to demonstrate the acquisition of knowledge and skills for online teaching and learning, which could be done by providing evidence such as an e-portfolio rather than being evaluated solely based upon completion of endorsement program course requirements. The committee discussed issues such as how competency-based evaluation can be paired effectively with credit-based courses for effective skill building, how to consider and include a variety of competencies in the endorsement requirements, and how to make the endorsement broad enough in scope to address all contingencies.

The state endorsement first needs to acknowledge the differences in skill sets required for teaching in online environments compared to face-to-face classrooms. Although the two instructional delivery mediums are not mutually exclusive, the K–12 online teaching endorsement must reflect consideration of the possibility that a teacher could excel in one environment and not the other. Thus, the endorsement structure needed to consider an endorsement candidate's experiences as a teacher and learner in online environments, rather than in face-to-face environments. Use of a range of technologies, especially emerging technologies and associated strategies for using such technologies, needed to be considered during the development of the endorsement. Last but not least, the development of a K–12 online teaching endorsement needed to take into consideration the human elements (e.g., online communications and managing online classrooms).

Discussion of implementation challenges faced by endorsement programs revolved around how to effectively and efficiently evaluate teacher candidates seeking a competency-based endorsement. For example, a model was discussed where artifacts from professional development activities (e.g., forum discussion posts produced in an online K–12 professional community of practice) could be counted toward meeting the competency requirement. A competency-based endorsement also presents challenges in monitoring progress and outcomes, as it usually took multiple iterations to evaluate artifacts claiming to meet certain competencies. Finally resource issues and technological access across variable social-economic groups were seen as influential factors in the successful implementation of any K–12 online teaching endorsement program that met the endorsement requirements.

Technology is in a state of constant change in today's 21st-century educational landscape. Online teaching requires knowledge and skills that should keep pace with this ever-changing landscape. Therefore, a state that offers a K–12 online teaching endorsement must be prepared to implement innovative and forward-looking educational

technologies and pedagogical methodologies. In order to keep best practices updated, requirements for the endorsement need to be frequently reviewed and revised as needed. Endorsement programs might be permitted to consider factors such as professional development experience, relevant coursework, and action research in assessing the level of contemporary expertise in candidates for the endorsement, thereby helping to keep the state's endorsement current (Dawley et al., 2010).

More importantly, states should be flexible as to how universities integrate standards into teacher education programs as they develop curriculum, best practices, and evidences for the evaluation of teacher candidates. Each university or college should be allowed to have its own curriculum and program standards for quality control while the state education agency evaluates the endorsement program as they do for any other teacher education program. However, the state should require that the quality standards used to evaluate teacher candidates for the K–12 online teaching endorsement be research-based, taking into consideration the latest research and development in an ever changing field.

To be eligible for an online teacher endorsement (Pre-K–12), the Idaho State Board of Education requires all teacher candidates to satisfy the following requirements:

- Meets states' professional teaching or licensure standards and is qualified to teach in his or her field of study.
- Provides evidence of online experience or course time both as a student and as a learner and demonstrates online learning and teaching proficiency.
- Has completed (Completes) an eight-week online teaching internship in a Pre-K–12 program, or has one year of verifiable and successful experience as a teacher delivering curriculum online in grades Pre-K–12 within the past three years.
- Provides verification of completion of a state-approved program of at least 20 semester credits hours of study in online teaching and learning at an accredited college or university or a state-approved equivalent.
- Demonstrates proficiency in the *Idaho Standards for Online Teachers*.

As we can see, the endorsement program requires evidence of academic qualifications, evidence of experience in online environments as both a learner and a teacher, and proficiency in the methods and tools of online instruction as outlined by the *Idaho Standards for Online Teachers*.

BSU's K–12 Online Teaching Endorsement Program: A Case Study

In August 2011 the Department of Educational Technology at BSU became a state-approved K–12 Online Teaching Endorsement program provider in the state of Idaho. BSU is a metropolitan research university located in Boise, Idaho, whose Department of Educational Technology offers various fully online programs at both the doctoral and master's levels. The Department of Educational Technology is somewhat unique in that

it has been preparing K–12 teachers to teach in online environments since 2006. In the process of becoming the program provider, the Department of Educational Technology developed an Endorsement Competency Checklist (2011) for evaluating teacher candidates' competencies and their alignment with the *Idaho Standards for Online Teachers*. This checklist was intended to be updated and revised periodically. It is excerpted in Appendix A and is available online from the program's home page.

An endorsement matrix was also developed in which performance indicators for the *Idaho K–12 Standards for Online Teachers* were illustrated with example artifacts. The matrix is not intended as a sample portfolio but instead is intended to illustrate how course-related artifacts could be used to demonstrate competencies. An excerpt from this matrix is reproduced in Appendix B.

BSU's program can be described in terms of three stages: admission requirements and procedures, overall program requirements, and evaluation and recommendation process.

1. *Admission requirements and procedures.* For students who were currently enrolled or had graduated from the Department of Educational Technology programs at BSU after 2006, no additional admission procedure was required. The rest of the candidates must first apply to the Graduate College of BSU as non-degree-seeking students in order to be placed in the endorsement program.

2. *Overall program requirements.* The endorsement program at BSU is competency-based and requires teacher candidates to demonstrate their competencies through a combination of course completions and artifacts. Specific program requirements include

   • Courses/competencies—all candidates must complete 20 credits of required or equivalent courses. Alternatively, all candidates must demonstrate competencies of online teaching and learning through submitted artifacts from relevant coursework or professional development experiences.
   • Minimum grade point average of 3.00 for all courses or equivalent courses.
   • At least one-year of online teaching experience in grades Pre-K–12 within the past three years.
   • Evidence of Idaho teacher certification.

3. *Evaluation and recommendation process.* The Department of Educational Technology at BSU evaluates teacher candidates and recommends them for endorsement to the Idaho State Department of Education if they meet all the program requirements. A support letter or report of professional online teaching experience from a school administrator or an online field teaching experience class can be used to satisfy the online teaching experience requirement.

More information about BSU's K–12 Online Teaching Endorsement can be found on the program's home page (http://edtech.boisestate.edu/idaho-K-12-online-teaching-endorsement-program).

Challenges and How They Were Resolved

All program providers face challenges in getting required courses in place, building partnerships with K–12 online schools that can host the online teaching field experience for teacher candidates, and deciding appropriate artifacts for demonstrations of required competencies.

Beginning any new program of study can be a challenge, and in the case of an online program, those challenges can be intensified. BSU had the advantage of being able to build upon existing Department of Educational Technology certification programs (e.g., Technology Integration, Online Teaching, and School Technology Coordination). All required courses had been previously offered, except the online teaching field experience course. In spring 2012 BSU's University Curriculum Council approved EDTECH 524, a two-credit graduate-level online teaching field experience designed to provide hands-on experience for teacher candidates in a fully online K–12 environment.

Despite preexisting curricula, a great length of time elapsed from conception to implementation of the endorsement program. Discussions about preservice and in-service teacher placement in online school environments had been occurring among BSU's College of Education, the Department of Educational Technology, and various online schools in Idaho for more than five years. Development of teaching standards and an endorsement by the state were also necessary preconditions for endorsement program development.

Placing teacher candidates or interns in an online K–12 school was more challenging than placing them in a face-to-face school. First, generally speaking, there are fewer virtual schools available for placement. Partnerships with virtual schools are not only critical for teacher placement but can also serve as a resource for research and process exchanges. For example, online schools are often very interested in increasing their pool of qualified teacher applicants. The Department of Educational Technology at BSU had a long history of partnering with virtual schools within the state as well as with IDLA, the state online supplemental program. IDLA agreed to host teacher candidates for the Department of Educational Technology at BSU's online teaching field experience as part of a pilot program.

In addition to hosting teachers, IDLA served as a valuable resource for the development of the student teacher placement processes as well as our new *K–12 Online Teaching Endorsement: Online Field Experience Guide* (EDTECH, 2012). IDLA also helped organize orientation activities, such as introducing students to mentor teachers and creating online tutorials for the teacher candidates to become familiar with their online course management system.

During the process of forming a partnership with this host online school, a series of new issues emerged. One such issue was how to fairly compensate online mentor teachers. During the process of setting up the field experience, we became aware that the honorarium for compensating traditional mentor teachers was not going to be sufficient for teachers in an online environment due to the higher time commitment involved. BSU thus offered to pay mentor teachers via IDLA an amount four times the typical rate for a public school teacher who agrees to supervise traditional teacher candidates or interns.

Another challenge occurred in obtaining background checks for potential intern teachers. In the state of Idaho, online schools do not accept background clearances from other states and required that all teacher candidates receive clearance in the state of Idaho. The Department of Educational Technology at BSU is an online graduate program, serving students from around the globe. The department was required to assist students located in other states and countries with fingerprint and background checks. This resulted in more financial expenses and logistical issues for those teacher candidates who lived outside of Idaho.

Competency-based evaluations also presented challenges, primarily in the time and effort it took to review candidates on a case-by-case basis. To simplify the evaluation process of the required competencies for meeting the K–12 Online Teaching Endorsement program at BSU, all competencies could be articulated through the BSU Endorsement Competency Checklist, which aligned with the *Idaho Standards for Online Teachers* in terms of their performance indicators. Using the checklist, artifacts could easily be evaluated on each performance factor.

Despite the many challenges faced, program implementation has been successful to date. During the spring 2012 semester, two teacher candidates successfully obtained their Idaho K–12 Online Teaching Endorsement through the Department of Educational Technology at BSU. In the fall semester of 2012, the online field experience course (i.e., EDTECH 524: Field Experience in Online Teaching) was offered for the first time to teacher candidates who had the desire to obtain hands-on teaching experience in an online Pre-K–12 program. IDLA teachers served as the mentor teachers for participating students.

Conclusion

The development of the Idaho K–12 Online Teaching Endorsement program at BSU provides a viable example of how colleges and universities can prepare teachers to teach in online environments, building on state standards and endorsement requirements designed to ensure that online teachers have the necessary qualifications and skills to be effective. The competency-based evaluation framework developed by BSU for its K–12 Online Teaching Endorsement program is highly flexible and adaptable. The framework's flexibility permits teacher candidates to substitute professional development experience for required coursework. Our experience has been that this not only saves time and resources for teachers, schools, and organizations but also motivates teachers to update their knowledge and skills for online teaching in a variety of ways, such as participating in online professional community discussion forums.

Following BSU's example, university teacher education programs could partner with local schools and institutions to provide teacher candidates with professional development workshops and internships in fully online K–12 environments and create a competency checklist as a developmental framework for online teacher evaluation and recommendation purposes.

Competency-based programs such as this can be updated on an ongoing basis, thus ensuring the ongoing evaluation of teacher candidates' competencies and skills in a changing 21st-century educational landscape. State adoption of competency-based

requirements could also facilitate multistate use of distance education resources, such as mutual recognition of the K–12 Online Teaching Endorsement program for teachers who resided and had been licensed in other states.

The process of developing BSU's online teaching endorsement program was not without its challenges. Although most courses needed were already in place for the endorsement program, several years elapsed from conception to implementation. Student placements in virtual schools were necessary. An existing partnership with IDLA proved invaluable, but placement still presented challenges, such as determining appropriate compensation for teacher mentors. Another barrier was the need for background checks of out-of-state program participants. Evaluation of teaching artifacts presented challenges in terms of the time and effort required, but the development of a competency checklist with artifact examples linked to standards-based performance indicators made this process easier. Despite the challenges we faced, our state-approved K–12 Online Teaching Endorsement program has been a success to date. We hope that others can learn from our experiences.

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Appendix A: K-12 Online Teaching Endorsement Competency Checklist (Excerpt)

BSU's Department of Educational Technology developed an Endorsement Competency Checklist (2011) for evaluating teacher candidates' competencies and their alignment with the *Idaho Standards for Online Teachers*. This checklist will be updated periodically. It is excerpted here and is available online from the program's home page.

Standard #1: Knowledge of Online Education—The online teacher understands the central concepts, tools of inquiry, and structures in online instruction and creates learning experiences that take advantage of the transformative potential in online learning environments.

Performance Indicator		*Checklist*	*Points*
The online teacher utilizes current standards for best practices in online teaching to identify appropriate instructional processes and strategies.	☐	Applications of online instructional principles/strategies/guidelines • Classroom practice examples • Synthesis of standards into best practice	_/10
The online teacher demonstrates application of communication technologies for teaching and learning.	☐	Applications of online teaching, learning, and communication technologies/tools • LMS (learning management system) • CMS (course management system) • E-mail • Discussion • Videoconference (Minimum # of one tool needed to pass)	_/5
	☐	Planning for communication in online course design • Checklist for what to do before the class begins • Checklist for things planned during the first week of class	_/5

Standard #2: Knowledge of Human Development and Learning—The teacher understands how students learn and develop, and provides opportunities that support their intellectual, social, and personal development.

Performance Indicator		Checklist	Points
The online teacher utilizes current standards for best practices in on-line teaching to identify appropriate instructional processes and strategies.	☐	• Multiple forms of delivery of the same content addressing multiple learning styles (text, audio, video, graphic) • Synchronous and asynchronous delivery of the content • Individual and group learning • Digital communities for extended learning activities • Applications of learning theories and instructional principles to provide multiple learning opportunities	_/10
The online teacher uses communication technologies to alter learning strategies and skills (e.g., media literacy, visual literacy).	☐	• Multiple representations of the same content (text, audio, video, graphic) • Multiple forms of delivery of the same content addressing multiple learning styles (synchronous and asynchronous modes)	_/10

Appendix B: K-12 Online Teaching Endorsement Matrix (Excerpt)

The following matrix excerpt illustrates multiple ways in which students can provide evidence to meet competencies for performance indicators in the *Idaho K–12 Standards for Online Teachers*. It should be noted that courses in this matrix are offered by BSU's Department of Educational Technology to provide students with opportunities to meet these competencies.

Framework for Teaching Domain #1: Planning and Preparation

Standard #1: Knowledge of Online Education—The online teacher understands the central concepts, tools of inquiry, and structures in online instruction and creates learning experiences that take advantage of the transformative potential in online learning environments.

EDTECH Course	Performance Indicator	Example Artifacts/Evidence
EDTECH 523: Advanced Online Teaching Methods	The online teacher utilizes current standards for best practices in online teaching to identify appropriate instructional processes and strategies.	• Principles of effective online instruction
EDTECH 512: Online Course Design EDTECH 521: Teaching Online in the K–12 Environment EDTECH 523: Advanced Online Teaching	The online teacher demonstrates application of communication technologies for teaching and learning (e.g., learning management system [LMS], content management system [CMS], e-mail, discussion, desktop videoconferencing, and instant messaging tools).	• Online course site • Netiquette consensus-building project • Adobe Connect recorded lesson • Adobe Connect live lesson
EDTECH 523: Advanced Online Teaching EDTECH 597: Social Network Learning	The online teacher demonstrates application of emerging technologies for teaching and learning (e.g., blogs, wikis, content creation tools, mobile technologies, virtual worlds).	• Virtual icebreaker project development wiki • Adobe Connect live lesson • Social network mind map
EDTECH 502: Internet for Educators EDTECH 597: Social Network Learning	The online teacher demonstrates application of advanced troubleshooting skills (e.g., digital asset management, firewalls, web-based applications).	• 502 website http://edtech2.boisestate.edu/sabaa/502/homepage/portfolio.html • Social network wiki: Troubleshooting the PLC

(Continues)

EDTECH Course	*Performance Indicator*	*Example Artifacts/Evidence*
EDTECH 512: Online Course Design	The online teacher demonstrates the use of design methods and standards in course/document creation and delivery.	• Online course site, message, and visual design guidelines
EDTECH 521: Teaching Online in the K–12 Environment EDTECH 502: Internet for Educators	The online teacher demonstrates knowledge of access, equity (digital divide), and safety concerns in online environments.	• Netiquette lesson • Netiquette rules for the online classroom • Accessibility lesson